

Clean Version of the Claims

29. (Amended) A transgenic animal which comprises an isolated and purified nucleic acid molecule coding for a protein having a potassium (K⁺) permeable membrane, comprising more than one P domains and three, four, five or more than six transmembrane segments encoding a potassium transport channel.

33. (Amended) A pharmaceutical composition for the treatment of diseases caused by a defective potassium transport or a deficiency of the potassium transport protein comprising an isolated and purified nucleic acid molecule coding for a protein having a potassium (K⁺) permeable membrane, comprising more than one P domains and three, four, five or more than six transmembrane segments or a prokaryote or eukaryote cell with a self-replicating vector comprising said nucleic acid molecule in one or more tissues having a defective potassium transport function under conditions which allow for the expression of the potassium transport channel in said tissue.